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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,217	01/24/2001	Bengt Gustav Lofmark	2739-4	2309

23117 7590 11/08/2005

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ARLINGTON, VA 22203

EXAMINER
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HAROLD, JEFFEREY F

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/768,217

Applicant(s)

LOFMARK, BENGT GUSTAV

Examiner

Jefferey F. Harold

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,8-11,13-17,19-26,28,31,32 and 34-39 is/are rejected.
- 7) ☒ Claim(s) 4-7,12,18,27,30 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1, 3, 8-11, 13-17, 19-26, 28, 31, 32, and 34-39*** rejected under 35

U.S.C. 102(b) as being anticipated by The Radio Amateur's Handbook (1973, fifth edition), hereinafter referenced as the handbook.

Regarding **claim 1**, the handbook discloses electrical laws and circuits in chapter 2. Specifically the handbook discloses defining the Q of circuits and adding filters to electrical filter networks to provide specific characteristics to the network. In addition, the handbook discloses a filter for filtering signals in a telecommunications system and for impedance matching to a predetermined complex impedance, wherein the filter is complex so that it matches the predetermined complex impedance at least approximately, and wherein a resistance of at least one of the filter components is chosen such that the resistance assists in giving the characteristic impedance of the filter its complex character, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 3**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the resistance is in series with a at least one inductance assisting in giving the filter the complex characteristic impedance, as exhibited in figure 2-53.

Regarding **claim 8**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the filter includes at least two cascade-coupled circuit segments of which at least one circuit segment includes at least the resistance that assistance in giving the characteristic impedance of the filter the complex character, as exhibited in figure 2-53.

Regarding **claim 9**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein resistance that assists in giving the characteristic impedance of the filter the complex character is comprised of at least resistor, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 10**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the resistance that assists in giving the characteristic impedance of the filter the complex character is comprised of at least one winding resistance of an inductor, as exhibited in figure 2-53.

Regarding **claim 11**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the predetermined complex impedance is the characteristic impedance of the transmission line, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 13**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the filter includes at least one cable simulator section, which cable simulator section has a characteristic impedance that matches the predetermined complex impedance at least approximately; wherein the filter also includes at least one capacitor, wherein said capacitor assists in

Art Unit: 2646

giving the filter at least one attenuation peak in a predetermined frequency range in co-action with said cable simulator section, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 14**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the filter includes at least one cable simulator section, which cable simulator section has a characteristic impedance that matches the predetermined complex impedance at least approximately; and in that the filter includes at least one coupled coil, which coupled coil includes an inductance in the cable simulator section and assists in giving the filter at least one attenuation peak in a predetermined frequency range, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 15**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the filter is a low-pass filter, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 16**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses wherein the filter includes a further pass band in a predetermined frequency range, the further pass band differing from the at least first pass band, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claim 17**, the handbook discloses everything claimed as applied above (see claim 1), in addition, the handbook discloses a splitter filter, as disclosed in pages 41-50 and exhibited in figure 2-53.

Regarding **claims 19-26, 28, 31, 32, and 34-39** are interpreted and thus rejected for the reasons set forth above in the rejection of claims above.

***Allowable Subject Matter***

2. **Claims 4-7, 12, 18, 27, 30, and 33** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

3. Applicant's arguments filed July 15, 2005 have been fully considered but they are not persuasive. The above recited rejection more than adequately meets the claimed limitations. Specifically, the examiner respectfully disagrees with the reference to the resistance or resistive element. The rejections above disclose the citation specifying that the rejections are based on pages 41-50 and figure 2-53. On page 43 the handbook discloses that the Q factor of a circuit affects filter's response. Further, as disclosed in figures 2-41 and 2-42, the resistor and inductor meet the claimed limitation and the curve (fig. 2-42) discloses the affect different Q values.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 2646

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH  
November 4, 2005



Jefferey F Harold  
Primary Examiner  
Art Unit 2646